



Environmental Epidemiology

Phone: 515-281-7462
<http://idph.iowa.gov/lpp>

Promoting & Protecting the Health of Iowans



Iowans may be exposed to environmental conditions that cause disease at home, outdoors, and in the workplace. Environmental Epidemiology helps protect the health of all Iowans by watching for and investigating diseases and illnesses caused by environmental conditions such as food borne illnesses, arsenic in private water wells, carbon monoxide poisonings, lead poisoning, and concerns about diseases during floods or other natural disasters. Environmental Epidemiology also seeks to prevent illnesses that are caused by environmental conditions through activities such as using data about environmental exposures more effectively to prevent disease and illness, assuring children are tested for lead poisoning, reducing exposure for lead-poisoned children, and providing information about ways to prevent harmful exposures at home, work, and play.

By working to understand and prevent harmful environmental exposures, Environmental Epidemiology helps keep Iowans safe.

Did you know?

1% of Iowa children will be lead-poisoned by their 6th birthday. This means about 400 Iowa children born each year will become lead poisoned by their 6th birthday.

In 2013, there were 72 traumatic work-related deaths reported in Iowa, with 90 deaths (preliminary data) for 2014. Iowa has a higher percentage of older worker deaths (55 years of age or older) with a 2009-2013 5-year average of 44% compared to a US average of 32%. Iowa's 5-year rate of worker deaths was 5.7 per 100,000 full-time equivalent workers compared to 3.5/100,000 FTE for the US (2009-2013 IA FACE and CFI data).

Why is Environmental Epidemiology important to promoting and protecting the health of Iowans?

- Everyone is at some risk for developing an environmental or occupational disease.
- Nearly 40% of Iowa houses were built before 1950, and most of these homes contain lead-based paint. Young children who live in pre-1950 houses are lead-poisoned when they put paint chips or exterior soil in their mouths or when they get house dust and soil on their hands and put them in their mouths.
- In 2014, Iowa had 759 adults (30% of those tested) with an elevated blood lead test of 10 mcg/dl or higher, with the majority occurring from workplace exposure. About 10% of adult elevated exposures in Iowa occur from hobby activities or while doing home renovation projects.
- In 2014, there was one reported death from CO exposure in Iowa and 34 individual reports of CO poisoning were received by IDPH.

Which Iowa Public Health Goals are we working to achieve?

Protect against environmental hazards

Prepare for, respond to, & recover from public health emergencies

Prevent epidemics & the spread of disease

Prevent injuries

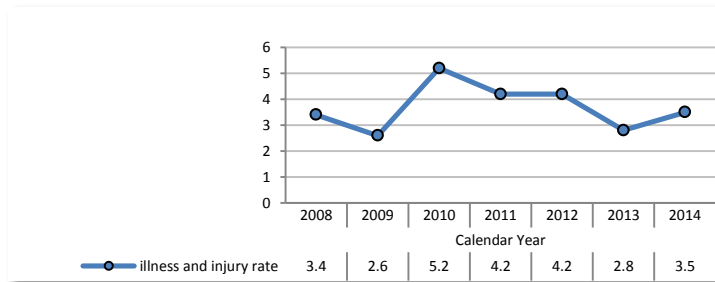
Strengthen the public health infrastructure

What do we do?

- Environmental Health Services works with other state and local agencies to investigate illnesses caused by food, water, or environmental exposures, providing guidance and assistance to local public health officials and other state agencies when needed.
- The Lead Poisoning Prevention program works to reduce childhood lead poisoning. The program manages data surveillance for the entire state. IDPH works with 24 local programs to provide funding and technical assistance and assure that services are available across the state. Services may include monitoring of blood test results for lead exposure, case management, lead hazard identification for lead-poisoned children, and educating Iowans about prevention.
- The Occupational Health and Safety Surveillance program tracks, analyzes, and reports work-related illnesses, injuries, and deaths, and cases of adult lead and pesticide poisoning. It also provides information to workers, employers, and other public health programs.
- The Environmental Public Health Tracking program involves the ongoing collection, integration, analysis, interpretation, and dissemination of data on environmental hazards, exposures to those hazards, and health effects that may be related to the exposures.

How do we measure our progress?

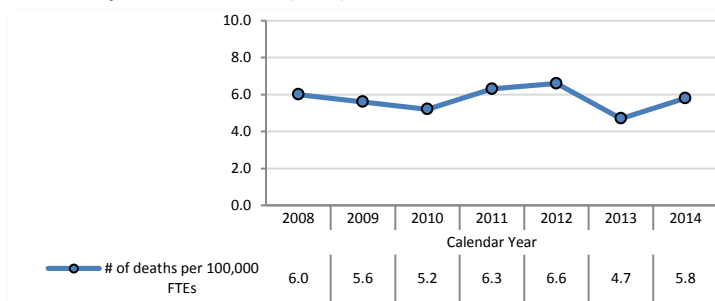
- Reported acute work-related pesticide associated illness and injury rate (per 100,000 workers 16 years of age or older).



Data Source: NIOSH and the American Association of Poison Control Centers. The numbers for 2013 & 2014 is based upon preliminary data.

How are we doing? Rates of work-related pesticide associated illness and injury continue to vary from year to year.

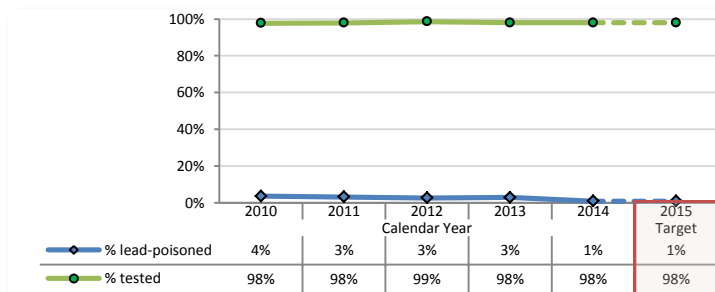
- Rate of fatal work-related injuries occurring in Iowa per 100,000 full time equivalent workers (FTEs).



Data Source: IDPH Occupational Surveillance Program and U.S. Department of Labor. Preliminary data are available annually, with a 2-year delay for final data. 2014 data not yet available.

How are we doing? Although Iowa saw a drop in work-related fatalities in 2013, the preliminary numbers for 2014 show a rebound to 90 traumatic deaths. Transportation incidents remain the highest cause of death in 2014 at 36% (down from 59% in 2011) with falls, slips, and trips the second highest cause at 28% (up from 8% in 2011). The leading industry sectors for work-place deaths are agriculture (31%) and construction (22%) with all service sector industries combined at 36%. Industry distribution remains similar over the past five years.

- Percent of Iowa children who get a blood lead test by age six.
- Percent of Iowa children getting a blood lead test who are identified as lead-poisoned.



Data Source: IDPH Childhood Blood Lead Surveillance Database. Data are available annually.

How are we doing? Virtually all Iowa children are now tested for lead poisoning at least once before kindergarten. The percentage of children tested for lead who are lead-poisoned is steadily decreasing.

What can Iowans do to help?

- If you have been diagnosed with an environmental-related disease, make sure your physician reports it to IDPH. For a list of reportable environmental diseases, go to <http://idph.iowa.gov/ehs/reportable-diseases>
- All Iowans should be aware of the dangers of pesticides. Report all human pesticide exposures by calling the Iowa Statewide Poison Control Center at 800-972-2026. <http://idph.iowa.gov/lpp/pesticide-poisoning>
- Local public health should consult the Environmental Epidemiology program for help and guidance on possible environmental exposures and health concerns.
- All Iowans should be aware of lead poisoning risks. Iowa parents should be aware of possible exposure to lead hazards and have their children tested for lead poisoning. Adults who work with lead should be aware that they can become lead-poisoned, their children can be poisoned by lead brought home on their clothes, and their unborn children can be exposed to lead if they are pregnant. <http://idph.iowa.gov/lpp>
- Follow laws requiring training and certification of those who identify or abate lead-based paint, and those who perform renovation, remodeling, and repainting in pre-1978 housing or child-occupied facilities. <http://idph.iowa.gov/lpp/certification>
- Iowa workplaces should adopt safety practices to prevent illnesses, injuries, and fatalities. <http://idph.iowa.gov/lpp/occupational-health>

Expenditures

Funding Sources: General fund, federal funds, & retained fees*. K13-1351; 0153-0402/0984/1708/1912/1954

	State Fiscal Year 2014 Actual	State Fiscal Year 2015 Actual	State Fiscal Year 2016 Estimate
State funds	\$533,390	\$507,811	\$537,750
Federal funds	\$866,676	\$1,237,722	\$1,198,493
Other funds*	\$591,288	\$296,229	\$464,738
Total funds	\$1,991,354	\$2,041,761	\$2,200,987
FTEs	10.59	10.42	10.20

Note: Funding information is intended to provide an overview of funding related to the program area. It does not include all federal and state requirements and/or restrictions for the use of funds. Contact the program area for more detailed budget information.

Iowa Department of Public Health

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Environmental Epidemiology

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